## **ENVIRONMENTAL CHEMISTS**

Date of Report: 12/09/98 Date Received: 11/25/98

Project: Metro Self Monitor, PO# M77773

Date Samples Extracted: 12/04/98 Date Extracts Analyzed: 12/08/98

## RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

## Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		Chromium	Copper	Nickel	Zinc
M77773		0.52	0.42	0.39	0.10
Method Blank	<b>c</b>	< 0.05	< 0.05	< 0.05	< 0.05

### **ENVIRONMENTAL CHEMISTS**

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Project: Metro Self Monitor, PO# M77773

# QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 812006-01 (Duplicate)

				Relative	
	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Copper	mg/L (ppm)	0.25	0.25	0	0-20
Nickel	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Zinc	mg/L (ppm)	0.20	0.21	5	0-20

Laboratory Code: 812006-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery % Recove	ery Acceptance	
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	< 0.05	98	97	80-120	1
Copper	mg/L (ppm)	5	0.25	97	94	80-120	3
Nickel	mg/L (ppm)	10	< 0.05	98	98	80-120	0
Zinc	mg/L (ppm)	5	0.20	102	101	80-120	1

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recov	ery % Recove	ery Acceptance	•	
Analyte	Units	Level	LCS	LCSD	Criteria	RPD	
Chromium	mg/L (ppm)	5	105	105	80-120	0	
Copper	mg/L (ppm)	5	107	108	80-120	1	
Nickel	mg/L (ppm)	10	106	107	80-120	1	
Zinc	mg/L (ppm)	5	106	107	80-120	1	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

#811128

MM BI 11/25/98 15:09

# SAMPLE CHAIN OF CUSTODY

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FORMS/COC

11/07/98

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 9, 1998

## **DUPLICATE COPY**

### **INVOICE #98ACU1209-1**

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M77773: Results of testing requested by Gerry Thompson for material submitted on November 25, 1998.

FEDERAL TAX ID (b) (6)

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 9, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 25, 1998 from your Metro Self Monitor, PO# M77773 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU1209R.DOC